Exhibit H

HWG | HARRIS, WILTSHIRE & GRANNIS LLP

Public

June 29, 2018

Via Email
Ms. Elizabeth Drogula
Deputy Division Chief
Telecommunications Access Policy Division
Wireline Competition Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: GCI Rural Health Care Support for Funding Year 2017

Dear Ms. Drogula,

Pursuant to Sections 0.457 and 0.459 of the Federal Communications Commission's ("FCC") rules, 47 C.F.R. §§ 0.457, 0.459, GCI Communication Corp. ("GCI") hereby requests confidential treatment of all materials that it submits in the attachments herein. The attachments contain materials responding to the request of the Telecommunications Access Policy Division ("the Division") for GCI Communication Corp. ("GCI") to modify its cost study regarding TERRA middle mile services provided to eligible rural health care providers ("HCPs") under the Rural Health Care ("RHC") Telecom Program. In the process of making this modification, GCI realized there was an error in the underlying calculations for the TERRA bandwidth allocator. It has updated the studies to correct this error, and provided modified supporting documentation on the bandwidth allocator in light of this correction.

The attachments herein include: (1) a modified TERRA rate of return bandwidth allocation cost study; (2) a modified TERRA rate of return bandwidth allocation cost study; (3) a bandwidth allocation utilization and methodology report; and (4) a written description of the process GCI used to allocate bandwidth among the various TERRA service categories.

GCI requests confidential treatment of all materials submitted herein, as well as the withholding of the designated information from any future public inspection.

In support of this request, GCI hereby states as follows:

1. Identification of Specific Information for Which Confidential Treatment Is Sought (Section 0.459(b)(1))

GCI seeks confidential treatment with respect to the content of this filing, which includes the attachments described above (the "Confidential Information").

2. Description of Circumstances Giving Rise to the Submission (Section 0.459(b)(2))

GCI received information requests from the RHC Telecom Program regarding certain 2017 funding requests of the HCPs for which GCI is a service provider. GCI provided confidential responses to the information requests in November and December 2017 and again on March 30, 2018.[1] Subsequently, GCI met with USAC and FCC staff to discuss the submissions, and the Division has requested that GCI respond to certain proposals and requests regarding the RHC Telecom Program review.

3. Explanation of the Degree to Which the Information Is Commercial or Financial, or Contains a Trade Secret or Is Privileged (Section 0.459(b)(3))

The information for which GCI seeks confidential treatment contains sensitive "trade secrets or privileged or confidential commercial, financial or technical data," which would customarily be guarded from competitors. This is sensitive commercial information that GCI does not otherwise make publicly available. As explained below, public disclosure of these measures could cause competitive commercial harm to GCI. In addition, the mere fact that GCI is being asked to respond may cause competitive harm. Therefore, the information in GCI's response constitutes sensitive commercial information "which would customarily be guarded from competitors."

4. Explanation of the Degree to Which the Information Concerns a Service that Is Subject to Competition (Section 0.459(b)(4))

The submitted information contains information regarding GCI's Alaska-based telecommunications services. The Alaskan wireline, wireless, and broadband market (including Ethernet) is subject to competition. In particular, the FCC recently found in the Business Data Services proceeding that the market for Ethernet services is highly competitive.

5. Explanation of How Disclosure of the Information Could Result in Substantial Competitive Harm (Section 0.459(b)(5))

Disclosure of GCI's Confidential Information would cause substantial competitive harm. *First*, disclosure would reveal information regarding GCI's services, including performance

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[1] *See, e.g.*, Letter from Jennifer P. Bagg, Counsel, GCI Commc'n Corp., to RHC Review, Rural Health Care Program, Universal Serv. Admin. Co. (filed Mar. 30, 2018) ("March 30 Letter").

characteristics and pricing, and HCP and E-rate customer information. GCI's competitors and customers could use this information to determine GCI's competitive position and associated revenues and thereby gain a competitive advantage. *Second*, disclosure of GCI's Confidential Information would place GCI at a competitive disadvantage, as GCI lacks the same information regarding its competitors. *Third*, disclosure of this information could harm the competitive bidding process in the RHC program.

6. Identification of Any Measures Taken to Prevent Unauthorized Disclosure (Section 0.459(b)(6))

GCI does not distribute the Confidential Information to the public, government officials, competitors, or customers. Each page of the documentation containing any of the Confidential Information is clearly marked in bold-face type "GCI Proprietary – Not for Public Disclosure."

7. Identification of Whether the Information Is Available to the Public and the Extent of Any Previous Disclosure of the Information to Third Parties (Section 0.459(b)(7))

GCI's Confidential Information is and shall remain unavailable to the public. As noted in Part 6 above, GCI has not previously disclosed to third parties, other than the undersigned counsel, any of the Confidential Information.

8. Justification of Period During Which the Submitting Party Asserts that Material Should Not Be Available for Public Disclosure (Section 0.459(b)(8))

GCI requests that the Confidential Information not be disclosed for 10 years from the date of this request. By that time, the sensitivity of GCI's commercial information will have diminished, as market changes will render it increasingly dated, and would make it difficult for competitors to gauge GCI's current market position and revenues.

* * * *

Should you have further questions or require additional information in order to grant the requested confidentiality treatment, please contact me immediately so that I can provide further assistance to resolve this matter.

Sincerely,

Jennifer P. Bagg
Counsel to GCI Communication Corp.

Enclosures

cc: Trent Harkrader
Preston Wise

TERRA ROR Bandwidth Allocation Redacted in Entirety

TERRA ROR Revenue Allocation Redacted in Entirety

TERRA Bandwidth Allocation/Utilization Report Redacted in Entirety

TERRA Bandwidth Allocation Methodology

June 29, 2018

For each year 2014 to 2017, the following process was used to allocate bandwidth among the various TERRA service categories –

Step 1 – Using available network provisioning data, all TERRA services were divided into the following nine service categories –

1. Rural Health Care
2. E-Rate
3. GCI Business (commercial customers - not Rural Health Care, not E-Rate)
4. GCI Core – Non-Cellular (includes Rural Broadband, cable modem and fixed wireless)
5. GCI Core – Wireless (including 2G and 3G data)
6. GCI Voice – Wireline (GCI MTS voice trunking including SS7 links)
7. GCI Voice – Wireless (including 2G and 3G voice services)
8. *GCI Administrative Traffic (excluded from the TERRA Bandwidth Utilization Model)*
9. *GCI Network Monitor and Control Traffic (excluded from the TERRA Bandwidth Utilization Model)*

Step 2 – Using network provisioning data, network traffic in each of the seven service categories was then separated into one of three service classes by their associated service level commitments (consistent with the way that traffic is actually provisioned on TERRA) –

Class	Availability	MOU/Month	RT Latency	Packet Loss	Restored
Priority Class	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Normal Class	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Best Efforts Class	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

- Priority Class (Dedicated) is used to provision RHC, E-Rate, GCI-B and retail wireline and wireless voice services
- Normal Class is used to provision E-Rate and GCI-B services (and GCI Admin and O&M services are also provisioned as Normal Class but have been excluded from the TERRA Bandwidth Utilization Model)
- Best Effort Class is used to provision GCI wireline and wireless data services

Step 3 – Oversubscription factors were calculated for Normal Class and Best Effort Class traffic by dividing TERRA provisioned port capacity by [redacted] percentile actual traffic volume as recorded by GCI's network monitoring systems.

- Normal over subscription levels were determined to be [redacted] in 2014, 2015 and 2016 increasing to [redacted] in 2017.
- Best Effort Class over subscription levels were determined to be [redacted]

Step 4 – An SLA adjustment factor was determined for TERRA Best Effort traffic by calculating the combined effect of increased RT Latency and Packet Loss, and reduced availability on TCP IP throughput assuming that offered traffic is held constant.

Step 5 – For each of the seven service categories-

- The aggregate TERRA Priority Class provisioned port capacity was added at 100% of the provisioned port capacity.
- The aggregate TERRA Normal Class provisioned port capacity was multiplied by the oversubscription factor to determine Adjusted TERRA Normal Class Utilization.
- The aggregate TERRA Best Effort Class provisioned port capacity was first multiplied by the oversubscription factor and then multiplied by the SLA Adjustment Factor to determine Adjusted TERRA Best Effort Class Utilization.

Step 6 – For each year, Total Adjusted TERRA Utilization for All Service Classes was calculated by adding together the Total Adjusted TERRA Utilization for each of the seven categories. Subsequently, percentage allocations were calculated by dividing Total Adjusted TERRA Utilization for each individual category by the Total Adjusted TERRA Utilization for All Service Categories.

Appendix
Calculating the SLA Adjustment Factor

Calculating the SLA Adjustment Factor

The SLA adjustment factor for Best Effort traffic was developed to demonstrate the difference in network performance targets when compared to Normal class service.

Three performance measures were used as inputs in the determination of the adjustment factor:

- Availability
- Latency
- Packet Loss

Availability

Availability is a measure of service uptime and is used as a figure of merit in communication system design. Service availability for Best Effort and Normal traffic types is necessarily and appropriately different due to the increased cost of delivering higher availability service.

The SLA for Normal class traffic is [redacted] and equates to [redacted] minutes of unavailable service per month. The SLA for Best Effort traffic is [redacted] and equates to [redacted] minutes of unavailable service per month. This difference in availability performance causes a Best Effort class service to be [redacted] less available than a Normal class service, thus a [redacted] adjustment factor is applied.

Latency

Latency is a measure of the transit time of information through the communications network. Latency is a critical system performance measure and establishes a limit on the maximum theoretical throughput of a TCP (Transmission Control Protocol) session. In addition to establishing limits on the theoretical throughput, latency also has an impact on user experience and can be referred to as “responsiveness” when viewed from an application perspective.

Latency at the TERRA network specified levels of 60ms and 120ms are used to compare service performance.

Table 1 below shows the theoretical throughput for a variety of packet loss and latency values. The Adjustment column shows the SLA adjustment factor to be applied for specific TERRA performance SLA levels.

Latency Performance Impacts on TCP			
Packet Loss Rate	**RTT (ms)**	**Theoretical Max TCP Throughput**	**Adjustment**
0.1%	50	7.4 Mbps	
0.1%	60	6.2 Mbps	
0.1%	120	3.1 Mbps	50%
1.0%	50	2.3 Mbps	
1.0%	60	1.9 Mbps	
1.0%	120	1.0 Mbps	50%
2.0%	50	1.7 Mbps	
2.0%	60	1.4 Mbps	
2.0%	120	0.7 Mbps	50%

rate < (MSS/RTT)*(C/sqrt(Loss))
https://www.slac.stanford.edu/comp/net/wan-mon/thru-vs-loss.html

Table 1 – Latency Performance Impacts on TCP Throughput

Packet Loss

Similar to latency, packet loss plays a significant role in establishing the performance limits of TCP within a packet network. Packets arriving corrupted or not at all within a network cause retransmission requests within the TCP protocol, thereby slowing the delivery of messages between two end systems. Work previously completed by Mathis et. al.[1] can be applied to the SLA packet loss and latency specifications to establish performance limits (and consequently an adjustment factor) for the TCP channel.[2]

Table 2 shows the impact of varying packet loss levels for three different latency values on TCP throughput using the Mathis results.

Through the computed Adjustment factor, it can be seen that increasing levels of packet loss and latency impact the TCP throughput performance significantly.

Packet Loss Performance Impacts on TCP			
Packet Loss Rate	**RTT (ms)**	**Theoretical Max TCP Throughput**	**Adjustment**
0.1%	50	7.4 Mbps	
1.0%	50	2.3 Mbps	
2.0%	50	1.7 Mbps	71%
0.1%	60	6.2 Mbps	
1.0%	60	1.9 Mbps	
2.0%	60	1.4 Mbps	71%
0.1%	120	3.1 Mbps	
1.0%	120	1.0 Mbps	
2.0%	120	0.7 Mbps	71%

rate < (MSS/RTT)*(C/sqrt(Loss))
https://www.slac.stanford.edu/comp/net/wan-mon/thru-vs-loss.html

[1] M. Mathis, J. Semske, J. Mahdavi, and T. Ott. The macroscopic behavior of the TCP congestion avoidance algorithm. Computer Communication Review, 27(3), July 1997.
[2] TCP constitutes [redacted] of GCI Internet traffic based on network measurements taken at the Seattle and Portland Internet Peering routers for the sample period of 6/1/2018 to 6/26/2018.

Table 2 – Packet Loss Performance Impacts on TCP Performance

Adjustment Factor Results

For the purposes of computing the adjustment factor, the Maximum segment size (MSS) was set to an industry standard 1460 Byte for both the latency and packet loss calculations.

Results in Table 1 show that TCP throughput is reduced by [redacted] when applying the Best Effort SLA latency of [redacted] (compared to the Normal SLA of [redacted]).

Results in Table 2 show that TCP throughput is reduced by [redacted] when applying the Best Effort packet loss SLA of [redacted] (compared to the Normal packet loss SLA of [redacted]).

The final SLA adjustment factor was determined by averaging the Availability ([redacted]), Latency ([redacted]) and Packet Loss ([redacted] values resulting in an SLA adjustment of [redacted] to Best Effort traffic.